## United States Patent [19] Taylor et al.

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[54]			D RETRIEVAL OF DIGITAL DEO TAPE RECORDERS		
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[56]	6] References Cited				
U.S. PATENT DOCUMENTS					
	4,142,243 2	/1979	Bishop et al 371/53		
	4,206,440 6				
	4,211,997 7	/1980	Rudnick et al 360/38.1		
	4 004 (40 0	14000	3.6		

4,224,642 9/1980 Mawatari et al. ...... 360/38.1

4,352,129 9/1982 1 4,355,324 10/1982 1 4,376,955 3/1983 1 4,393,502 7/1983	Baldwin 360/32   Baldwin 360/32   Reitmeier 360/22   Reitmeier 360/38.1   Tanaka et al. 371/40   Iva 371/40
4,400,810 8/1983	Ive 371/40

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## [57] **ABSTRACT**

A digital data manipulation system for compensating for drop outs on a video recording medium. Data received by an assembler is assigned to a predetermined non-standard format prior to recording. Addition of synchronizing information via process amplifier allows the digital data to be recorded on an analog video tape recorder as lines of video information. A checksum generator and parity bit generator are provided to effect two dimensional coding indicative of assigned data content both prior to recording and following playback. By detecting any differences between the coding information this identifies drop out errors to allow compensation therefor.

9 Claims, 18 Drawing Figures

